

What is claimed is:

1. A mobile communications system having a wireless control apparatus connected to a mobile communications unit, and a node which is connected to the wireless control apparatus and provided  
5 on a packet switching (PS) network side configuring a core network, and has a packet processing capability, wherein  
the node comprises:

PS user data processing means for controlling user data relating to a PS call of the mobile communications unit;  
10 CS user data processing means for controlling user data relating to a CS (circuit switching) call of the mobile communications unit; and  
control means for controlling said PS and CS user data processing means by controlling signaling relating to the PS  
15 call and the CS call.

2. The mobile communications system according to claim 1, wherein:

the node is located between the wireless control apparatus and an IP network; and  
20 said CS user data processing means comprises a CODEC for performing mutual conversion between a coding system of user data on a wireless control apparatus side and a coding system on an IP network side.

3. The mobile communications system according to claim 2,  
25 wherein

said CS user data processing means comprises means for performing mutual conversion between a packet format of user data on the wireless control apparatus side and a packet format on the IP network side.

5   4.   The mobile communications system according to claim 2, wherein:

    a connection request relating to the CS call from the mobile communications unit includes information about a connection through the IP network; and

10      the wireless control apparatus detects the information and connects the CS call to the node.

5.   A node which is connected to a wireless control apparatus connected to a mobile communications unit and provided on a packet switching (PS) network side configuring a core network of a mobile communications system, and has a packet processing capability, comprising:

    PS user data processing means for controlling user data relating to a PS call of the mobile communications unit;

20      CS user data processing means for controlling user data relating to a CS (circuit switching) call of the mobile communications unit; and

    control means for controlling said PS and CS user data processing means by controlling signaling relating to the PS call and the CS call.

25   6.   The node according to claim 5, wherein:

the node is located between the wireless control apparatus and an IP network; and

5 said CS user data processing means comprises a CODEC for performing mutual conversion between a coding system of user data on a wireless control apparatus side and a coding system on an IP network side.

7. The node according to claim 6, wherein

10 said CS user data processing means comprises means for performing mutual conversion between a packet format of user data on the wireless control apparatus side and a packet format on the IP network side.

15 8. A wireless control apparatus connected to a mobile communications unit and a node which is provided between the wireless control apparatus and an IP network and on a packet switching (PS) network side forming a core network, has a packet processing capability, and comprises:

PS user data processing means for controlling user data relating to a PS call of the mobile communications unit;

20 CS user data processing means for controlling user data relating to a CS (circuit switching) call of the mobile communications unit; and

control means for controlling said PS and CS user data processing means by controlling signaling relating to the PS call and the CS call, wherein:

a connection request relating to the CS call from the mobile communications unit includes information about a connection through the IP network; and

means for detecting the information and connecting the CS 5 call to the node is included.

9. An operation control method for a mobile communications system having a wireless control apparatus connected to a mobile communications unit, and a node which is connected to the wireless control apparatus and provided on a packet switching (PS) network 10 side configuring a core network, and has a packet processing capability, wherein

the node comprises:

a PS user data processing step of controlling user data relating to a PS call of the mobile communications unit;

15 a CS user data processing step of controlling user data relating to a CS (circuit switching) call of the mobile communications unit; and

a control step of controlling signaling relating to the PS call and the CS call.

20 10. The operation control method according to claim 9, wherein: the node is located between the wireless control apparatus and an IP network; and

the CS user data processing step comprises a step of performing mutual conversion between a coding system of user 25 data on a wireless control apparatus side and a coding system on an IP network side.

11. The operation control method according to claim 10, wherein:  
the CS user data processing step comprises a step of  
performing mutual conversion between a packet format of user  
data on a wireless control apparatus side and a packet format  
5 on an IP network side.
  
12. The operation control method according to claim 10, wherein:  
a connection request relating to the CS call from the mobile  
communications unit includes information about a connection  
through the IP network; and  
10 the wireless control apparatus comprises the steps of  
detecting the information and connecting the CS call to the node.
  
13. A record medium recording a program used to direct a computer  
to perform an operation of a node which is connected to a wireless  
control apparatus connected to a mobile communications unit and  
15 provided on a packet switching (PS) network side configuring  
a core network of a mobile communications system, and has a packet  
processing capability, comprising:  
a PS user data processing step of controlling user data  
relating to a PS call of the mobile communications unit;  
20 a CS user data processing step of controlling user data  
relating to a CS (circuit switching) call of the mobile  
communications unit; and  
a control step of controlling signaling relating to the  
PS call and the CS call.

14. The record medium according to claim 13, wherein:
  - the node is located between the wireless control apparatus and an IP network; and
  - the CS user data processing steps comprises a step of
- 5 performing mutual conversion between a coding system of user data on a wireless control apparatus side and a coding system on an IP network side.

  

15. The record medium according to claim 14, wherein:
  - the CS user data processing step comprises a step of
- 10 performing mutual conversion between a packet format of user data on the wireless control apparatus side and a packet format on the IP network side.